

Rio Grande River with the Sandias, photo by Marble Street Studios

The availability of water has played a major role in the human settlement and development of communities in the Middle Rio Grande Valley. This is due to the region's arid climate, requiring irrigation for the production of most crops. Although agricultural traditions are still strong today, the competition for limited water resources is presently affecting the balance of supply and demand.

New Mexico's mid-region is the most populous and developed area in the state with a variety of major water users including agriculture and industry, as well as residential demand. This means increased competition for a limited supply. Today, water in the Middle Rio Grande area is consumed at a rate that results in the mining of ground water and the depletion of streams and springs. As irrigation of farmland in our region is largely dependent on water diverted from the Rio Grande River, maintaining water for agriculture is of the utmost importance.

In addition to water quantity issues, the area is also faced with water quality concerns due to pollutants contributed by urban and agricultural runoff. Environmental laws are also putting demands on the Rio Grande to provide adequate surface water to meet ecosystem needs, and there is a growing concern over legal rights to the use and allocation of water in the Rio Grande Basin.

In order to preserve water for future use, and in particular to sustain water for agricultural purposes, conservation and management of this limited resource is imperative.

Irrigation in Our Region



The irrigation of farmland in New Mexico's mid-region is largely dependent on surface water diverted from the Rio Grande, with some irrigation occurring from groundwater wells.

The Middle Rio Grande Conservancy District, established in 1923, provides an elaborate system of ditches and canals that carry water from river to fields. Although the water available to the farmers is subject to the managed flow of the Rio Grande River, which is sensitive to precipitation and drought, water for agriculture is usually reliable and equitably distributed.

Water applied to agriculture recharges the underground aquifer, and also provides some return flow back to the river. As a result, the the lush vegetation and wildlife of the Rio Grande Valley is protected.

Water Conservation Options

Agricultural water use accounts for a large percentage of the water used in New Mexico's mid-region, however there are a variety of water conservation measures that can be adopted:

- Real-time metering and measuring of water flow and use patterns
- Upgrade agricultural water conveyance systems
- Laser-leveling of irrigated fields
- Water pricing structure that encourages efficiency
- Converting to low water consumptive crops

- Technological innovations such as drip irrigation, greenhouse gardening, etc.
- Alternative water sources such as standby wells, grey water, storm water harvesting, etc.
- Water banking and leasing arrangements
- Information and education services for water users
- Utilize non-potable (unsafe for drinking) or recycled water

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